Divar Digital Video Recorder

www.boschsecurity.com

BOSCH
Invented for life

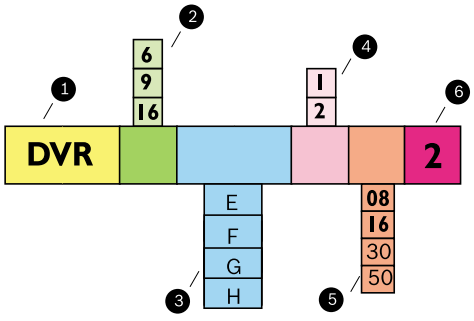
- 6, 9, and 16-channel versions
- Bilinx communication optional
- Simultaneous recording, playback & archiving
- AutoDome control
- Smart motion search

The Bosch Divar digital video recorder series are extremely compact, low profile units that combine advanced digital recording and multiplexing, not only saving space, but ensuring integrated functionality.
The Divar has been designed with both operator and installer in mind, by making the unit easy to use and install, and maintenance free. The Divar allows simultaneous recording and playback of video images. “Overwrite protection” of marked video clips prevents the loss of vital material.
The images per second (IPS) record rate and image quality are selectable for each connected camera. This makes it possible to prioritize recording between high-risk areas and low risk areas. By having a higher refresh rate only for critical or high-risk security areas, considerable hard disk space can be saved. Recording rates of 50 IPS (PAL) or 60 IPS (NTSC) are guaranteed, without the need for synchronization.
As well as control of external alarm inputs, the Divar's motion detector triggers an alarm when movement in a user-definable area of the image is detected.
Smart motion search can be used for easy retrieval of motion that has taken place within a user-specified part of the image during a specified time-span.
The Divar is expandable with an optional keyboard, allowing AutoDome control as well as enhanced playback control.

Where video is required for evidence of an incident, it is simple to archive the video with a dedicated PC player for playback of the secure video files to a DVD or CD with the internal or external DVD writer. The Divar uses video authentication that can automatically detect any alteration of the recorded video.
For easy installation, a “Quick install” feature is included. Additionally, on-screen menus are provided in several languages and context sensitive help is always available by just pushing the yellow button. A configuration tool is supplied to simplify setting up a system using a PC. Because Divar is available with Bilinx, functions usually requiring hands-on access to a camera now use the video cable to communicate with Bilinx cameras.
Owing to its high degree of integrated functionality, the Divar can be the central element in a self-contained security system with up to 256 cameras. Because the Divar is fully compatible with any standard 10/100 Base-T network, it is ideal for distributed security surveillance systems.
An optional ATM/POS bridge enables financial transaction details to be recorded together with video. This makes the Divar suitable for use at cash dispensers, check out desks and other similar applications where it is sometimes necessary to verify or identify what happened during a particular transaction.

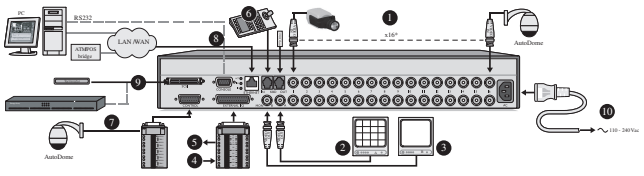
Full control is also possible when using the user-friendly Control Center software that allows remote viewing of live and recorded video from multiple Divars at the same time. This makes it ideal for multiple location systems such as chains of shops or fast food outlets. Using Internet Explorer, the Divar can also be accessed to view live action or playback archived event without special software software or tools. Where additional storage is required, optional storage arrays can be connected to expand the storage capacity. It is even possible to calculate the required capacity by visiting www.boschsecuritysystems.com and use the Divar storage calculator.

Installation/configuration notes

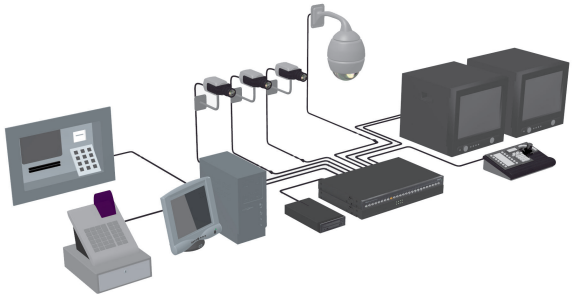


1	Type
2	Video inputs
3	E: Divar F: Divar with internal DVD writer G: Divar with Bilinx H: Divar with Bilinx and internal DVD writer
4 & 5	Disk capacity is the multiple of these two figures times 10 in GB
6	Revision

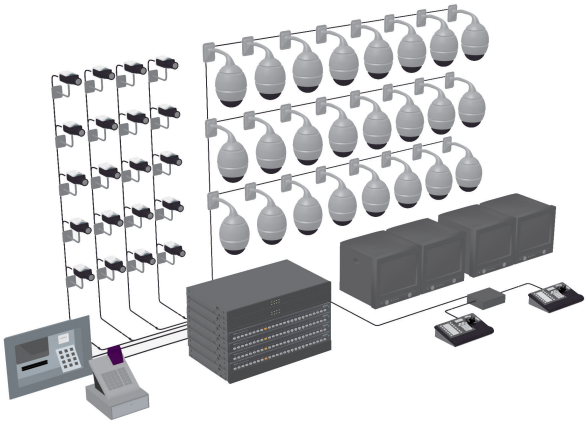
Notice
the "G" option (Divar with Bilinx) is only available in the EMEA and the APR regions (this option is not offered in the US).



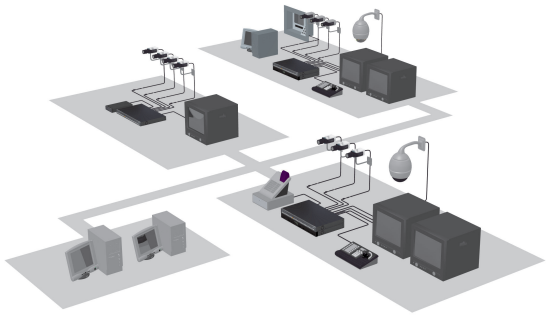
01	Cameras	06	Keyboard
02	Monitor	07	Control
03	Spot monitor	08	Ethernet
04	Inputs	09	SCSI
05	Outputs	10	Power



COMPLETE STAND-ALONE SYSTEM
Extending the functionality of a single Divar for active observation. This Divar system uses a universal keyboard for controlling fixed and AutoDome or PTZ cameras. It has a main monitor plus spot monitor, alarm I/O (for external alarms and sensors), a storage array and a PC with Control Center software. A DVD writer is used for making archives. An ATM/POS bridge can be used to connect to an ATM or point-of-sale machine.



MEDIUM LOCALIZED SYSTEM
Using the Bosch Video Manager to build up CCTV recording system. Up to 16 Divar units with storage arrays for longer archive are managed by Video Manager. There can be two monitor locations, each with its own keyboard and alarm monitor. The alarm I/O is linked to external alarms. An ATM/POS bridge can be used to connect to an ATM or point-of-sale machine.



MULTI-LOCATION WITH CENTRALIZED CONTROL
Using a wide-area network to link Divar systems in various locations. Each location has a local Divar system (from basic to complete). All locations are linked via a local- or wide-area network (LAN or WAN) to a PC with Control Center software for remote observation and system management. An ATM/POS bridge can be used to connect to an ATM or point-of-sale machine.

Technical specifications

Electrical

Rated Voltage and Power	
E and G versions	100–240 VAC; 0.7–0.3 A; 50/60 Hz
F and H versions	100–240 VAC; 0.8–0.3 A; 50/60 Hz

Video	
Video standard	PAL / NTSC auto-detect
Resolution	720x576 PAL, 720x484 NTSC
AGC	Automatic adjustment or manual adjustment for each video input
Digital Zoom	2 or 4 times
Compression	Wavelet
Inputs	Composite video 0.5–2 Vpp, 75 ohm auto terminating
Outputs:	1 Vpp, 75 ohm
BiPhase	Impedance 128 ohm, max. overvoltage protection ±40 V, max. cable length 1.5 km

Alarm Handling	
Inputs	16 Inputs configurable NO/NC, max. input 40 VDC
Outputs	4 Relay outputs, configurable NO/NC, max. rated 30 VAC–40 VDC, 0.5 A continuous -10 VA

Control	
RS232	Output signals according EIA/TIA-232-F, max. input voltage ±25 V
Keyboard input	Conforms to RS485, max. signal voltage ±12 V, power supply to keyboard 11–12.6 V at max. 400 mA
Keyboard output	Conforms to RS485, max. signal voltage ±12 V

Connectors	
Video inputs	6, 9, or 16 looping BNC, auto-terminating
Ethernet	RJ45S modular jack 8 pins shielded:
	10/100 Base-T according IEEE802.3
Monitors	BNC (2), MON-A multi-screen, MON-B
	spot/alarm
Alarm Accessories	Screw terminal input
BiPhase	Screw terminal output
RS232	DB9 male
Keyboard input	RJ11 modular jack 6 pins
Keyboard output	RJ11 modular jack 6 pins
SCSI	HD 50 pins max. 7 (E and G versions) / 6 (F and H versions) connected ultra SCSI devices, 20 Mbytes/sec, terminated internally

Storage	
Internal	80, 160, 320, 600, 1000 GB
External	Via DVSA, Digital Video Storage Array

File sizes	
High quality	40 KB
Medium quality	24 KB
Standard quality	16 KB

Record Rate (IPS):	
NTSC	60 total, configurable per camera: 30, 15, 10, 7.5, 6, 5, 4, 3, 2, 1, ½, 1/5, 1/10, 0
PAL	50 total, configurable per camera: 25, 12.5, 8, 6, 5, 4, 3, 2, 1, ½, 1/5, 1/10, 0
Recording resolution:	720x288 PAL, 720x242 NTSC

Display Modes	
Mon A	Full, full sequence, quad, quad sequence, multi-screen, alarm call-up (live and playback)
Mon B	Full, full sequence and alarm call-up

Recording Modes	Linear, Continuous, Continuous with conditional overwrite

Mechanical

Dimensions	
E and G versions	442 x 315 x 45 mm (17.4 x 12.4 x 1.8 in)
F and H versions	442 x 315 x 66 mm (17.4 x 12.4 x 2.6 in)
Weight	
E and G versions	Approx. 5.8 kg (12.8 lb)
F and H versions	Approx. 7.5 kg (16.5 lb)
Rack Mount Kit	For mounting one unit in an EIA 19-inch rack.

Environmental

Temperature	
Operating Temperature	
E and G versions	+0°C to +40°C (+32°F to +104°F)
F and H versions	+5°C to +40°C (+41°F to +104°F)
Storage Temperature	-25°C to +70°C (-13°F to +158°F)
Relative humidity	
Operating	<93% Non-condensing
Storage	<95% Non-condensing
Electromagnetic compatibility	
EMC requirements	
USA	FCC Part 15, Class B
EU	EMC directive 89/336/EEC
Immunity	EN50130-4
Emission	EN55022 Class B
Mains Harmonics	EN61000-3-2
Voltage fluctuations	EN61000-3-3
Safety	
USA	UL6500 2nd edition
EU	EN60950: 2000
Can.	CAN/CSA-E60065-00

Minimum PC System Requirements

Control Center (CC) and Configuration Tool (CT)	
Operating system	Windows 98, Millennium, NT 4.0, 2000 or XP
Processor	450 MHz Pentium II for CC, 200 MHz Pentium with MMX for CT
RAM memory	128 MB for CC, 32 MB for CT
Free disk space	50 MB for CC, 15 MB for CT
Video system	8 MB video memory,
	800x600 with 16-bit color
Connection	10/100-BaseT network interface or free RS-232 port (CT only)

Ordering information

DVR6E1082 Divar Digital Video Recorder
6 channel, with network I/F, 80 GB
Order number **DVR6E1082**

DVR6E1162 Divar Digital Video Recorder
6 channel, with network I/F, 160 GB
Order number **DVR6E1162**

DVR6E2162 Divar Digital Video Recorder
6 channel, with network I/F, 320 GB
Order number **DVR6E2162**

DVR6E2302 Divar Digital Video Recorder
6 channel, with network I/F, 600 GB
Order number **DVR6E2302**

DVR9E1082 Divar Digital Video Recorder
9 channel with network I/F, 80 GB
Order number **DVR9E1082**

DVR9E1162 Divar Digital Video Recorder
9 channel with network I/F, 160 GB
Order number **DVR9E1162**

DVR9E2162 Divar Digital Video Recorder
9 channel with network I/F, 320 GB
Order number **DVR9E2162**

DVR9E2302 Divar Digital Video Recorder
9 channel with network I/F, 600 GB
Order number **DVR9E2302**

DVR16E1082 Divar Digital Video Recorder
16 channel, with network I/F, 80 GB
Order number **DVR16E1082**

DVR16E1162 Divar Digital Video Recorder
16 channel, with network I/F, 160 GB
Order number **DVR16E1162**

DVR16E2162 Divar Digital Video Recorder
16 channel, with network I/F, 320 GB
Order number **DVR16E2162**

DVR16E2302 Divar Digital Video Recorder
16 channel, with network I/F, 600 GB
Order number **DVR16E2302**

DVR16E2502 Divar Digital Video Recorder
16 channel, with network I/F, 1 TB
Order number **DVR16E2502**

DVR6F1082 Divar Digital Video Recorder
6 channel, with network I/F, 80GB with internal DVD
Order number **DVR6F1082**

DVR6F1162 Divar Digital Video Recorder
6 channel, with network I/F, 160GB with internal DVD
Order number **DVR6F1162**

DVR6F2162 Divar Digital Video Recorder
6 channel, with network I/F, 320GB with internal DVD
Order number **DVR6F2162**

DVR6F2302 Divar Digital Video Recorder
6 channel, with network I/F, 600GB with internal DVD
Order number **DVR6F2302**

DVR9F1082 Divar Digital Video Recorder
9 channel with network I/F, 80GB with internal DVD
Order number **DVR9F1082**

DVR9F1162 Divar Digital Video Recorder
9 channel, with network I/F, 160GB with internal DVD
Order number **DVR9F1162**

DVR9F2162 Divar Digital Video Recorder
9 channel, with network I/F, 320GB with internal DVD
Order number **DVR9F2162**

DVR9F2302 Divar Digital Video Recorder
9 channel with network I/F, 600GB with internal DVD
Order number **DVR9F2302**

DVR16F1082 Divar Digital Video Recorders
16 channel, with network I/F, 80GB with internal DVD
Order number **DVR16F1082**

DVR16F1162 Divar Digital Video Recorders
16 channel with network I/F, 160GB with internal DVD
Order number **DVR16F1162**

DVR16F2162 Divar Digital Video Recorder
16 channel, with network I/F, 320GB with internal DVD
Order number **DVR16F2162**

DVR16F2302 Divar Digital Video Recorder
16 channel, with network I/F, 600GB with internal DVD
Order number **DVR16F2302**

DVR16F2502 Divar Digital Video Recorder
16 channel, with network I/F, 1 TB with internal DVD
Order number **DVR16F2502**

DVR6G1082 Divar with Bilinx Digital Video Recorder
6 channel, with network I/F, 80GB
Order number **DVR6G1082**

DVR6G1162 Divar with Bilinx Digital Video Recorder
6 channel, with network I/F, 160GB
Order number **DVR6G1162**

DVR6G2162 Divar with Bilinx Digital Video Recorder
6 channel, with network I/F, 320GB
Order number **DVR6G2162**

DVR6G2302 Divar with Bilinx Digital Video Recorder
6 channel, with network I/F, 600GB
Order number **DVR6G2302**

DVR9G1082 Divar with Bilinx Digital Video Recorder
9 channel, with network I/F, 80GB
Order number **DVR9G1082**

DVR9G1162 Divar with Bilinx Digital Video Recorder
9 channel, with network I/F, 160GB
Order number **DVR9G1162**

DVR9G2162 Divar with Bilinx Digital Video Recorder
9 channel, with network I/F, 320GB
Order number **DVR9G2162**

DVR9G2302 Divar with Bilinx Digital Video Recorder
9 channel, with network I/F, 600GB
Order number **DVR9G2302**

DVR16G1082 Divar with Bilinx Digital Video Recorder
16 channel, with network I/F, 80GB
Order number **DVR16G1082**

DVR16G1162 Divar with Bilinx Digital Video Recorder
16 channel, with network I/F, 160GB
Order number **DVR16G1162**

DVR16G2162 Divar with Bilinx Digital Video Recorder
16 channel, with network I/F, 320GB
Order number **DVR16G2162**

DVR16G2302 Divar with Bilinx Digital Video Recorder
16 channel, with network I/F, 600GB
Order number **DVR16G2302**

DVR6H1082 Divar with Bilinx Digital Video Recorder
6 channel, with network I/F, 80 GB, with internal DVD
Order number **DVR6H1082**

DVR6H1162 Divar with Bilinx Digital Video Recorder
6 channel, with network I/F, 160GB, with internal DVD
Order number **DVR6H1162**

DVR6H2162 Divar with Bilinx Digital Video Recorder
6 channel, with network I/F, 320 GB, with internal DVD
Order number **DVR6H2162**

DVR6H2302 Divar with Bilinx Digital Video Recorder
6 channel, with network I/F, 600GB, with internal DVD
Order number **DVR6H2302**

DVR9H1082 Divar with Bilinx Digital Video Recorder
9 channel, with network I/F, 80GB, with internal DVD
Order number **DVR9H1082**

DVR9H1162 Divar with Bilinx Digital Video Recorder
9 channel, with network I/F, 160GB, with internal DVD
Order number **DVR9H1162**

DVR9H2162 Divar with Bilinx Digital Video Recorder
9 channel, with network I/F, 320GB, with internal DVD
Order number **DVR9H2162**

DVR9H2302 Divar with Bilinx Digital Video Recorder
9 channel, with network I/F, 600GB, with internal DVD
Order number **DVR9H2302**

DVR16H1082 Divar with Bilinx Digital Video Recorder
16 channel, with network I/F, 80 GB, with internal DVD
Order number **DVR16H1082**

DVR16H1162 Divar with Bilinx Digital Video Recorder
16 channel, with network I/F, 160 GB, with internal DVD
Order number **DVR16H1162**

DVR16H2162 Divar with Bilinx Digital Video Recorder
16 channel, with network I/F, 320 GB, with internal DVD
Order number **DVR16H2162**

DVR16H2302 Divar with Bilinx Digital Video Recorder
16 channel, with network I/F, 600 GB, with internal DVD
Order number **DVR16H2302**

DVR16H2502 Divar with Bilinx Digital Video Recorder
16 channel, with network I/F, 1 TB, with internal DVD
Order number **DVR16H2502**

Accessories

KBD-Digital Keyboard
IntuiKey Digital Keyboard for use with Divar Digital Video Recorders, System4 Multiplexers, Bosch VMS, and VIDOS
Order number **KBD-DIGITAL**

KBD-Universal Keyboard
IntuiKey Universal Keyboard for use with Allegiant, Divar, System4 Multiplexers, Bosch VMS, and VIDOS
Order number **KBD-UNIVERSAL**

Divar External CD/DVD Writer (Accessories)
DVRXEDVD1
Order number **DVRXEDVD1**

DVRXEAP01 ATM/POS Bridge
ATM/POS bridge for Bosch recording systems
Order number **DVRXEAP01**

LTC 2605/91 System4 Video Manager
for use with Divar and System 4 Multiplexers, 105–253 VAC, 50/60 Hz
Order number **LTC 2605/91**

LTC 8557/50 Keyboard Extension Kit
Hook-up kit for remote keyboard, up to 1.5 km (5000 ft), includes power supply for 230 VAC, 50 Hz
Order number **LTC 8557/50**

LTC 8557/60 Keyboard Extension Kit
Hook-up-kit for remote keyboard, up to 1.5 km (5000 ft), includes power supply for 120 VAC, 60 Hz
Order number **LTC 8557/60**

LTC 2604/50 Keyboard Port Expander Unit
System4, 230 V, 50 Hz
Order number **LTC 2604/50**

LTC 2604/60 Keyboard Port Expander Unit
System4, 120 V, 60 Hz
Order number **LTC 2604/60**

Software Options

DVRSEUG12 Divar-1 Upgrade License
Order number **DVRSEUG12**

DVRSEAP01 ATM/POS License DIVAR
Order number **DVRSEAP01**

Represented by:

Americas:
Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
security.sales@us.bosch.com
www.boschsecurity.us

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5617 BA Eindhoven, The Netherlands
Phone: + 31 40 2577 284
Fax: +31 40 2577 330
emea.securitysystems@bosch.com
www.boschsecurity.com

Asia-Pacific:
Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6571 2808
Fax: +65 6571 2699
apr.securitysystems@bosch.com
www.boschsecurity.asia

China:
Bosch (Shanghai) Security Systems Ltd.
201 Building, No. 333 Fuquan Road North IBP
Changning District, Shanghai
200335 China
Phone +86 21 22181111
Fax: +86 21 22182398
www.boschsecurity.com.cn

America Latina:
Robert Bosch Ltda Security Systems Division
Via Anhanguera, Km 98
CEP 13065-900
Campinas, Sao Paulo, Brazil
Phone: +55 19 2103 2860
Fax: +55 19 2103 2862
latam.boschsecurity@bosch.com
www.boschsecurity.com

© Bosch Security Systems 2013 | Data subject to change without notice
2124992139 | en, V1, 04. Oct 2013